

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

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Date of mailing (day/month/year) 12 May 2000 (12.05.00)	Applicant's or agent's file reference 2008005
International application No. PCT/SE99/01573	Priority date (day/month/year) 10 September 1998 (10.09.98)
International filing date (day/month/year) 09 September 1999 (09.09.99)	
Applicant LINDGREN, Per et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

06 April 2000 (06.04.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer R. Raissi
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT 15

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PC-2008005	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SE99/01573	International filing date (day/month/year) 09.09.1999	Priority date (day/month/year) 10.09.1998
International Patent Classification (IPC) or national classification and IPC ₇ H 04 L 12/52, H 04 Q 11/04, H 04 J 3/16		
Applicant Net Insight AB et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 06.04.2000	Date of completion of this report 04.08.2000
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Dan Ionesco/mj Telephone No. 08-782 25 00

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/01573

I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

- ☒ the international application as originally filed.
- ☐ the description, pages _____, as originally filed,
 pages _____, filed with the demand,
 pages _____, filed with the letter of _____,
 pages _____, filed with the letter of _____.
- ☐ the claims, Nos. _____, as originally filed,
 Nos. _____, as amended under Article 19,
 Nos. _____, filed with the demand,
 Nos. _____, filed with the letter of _____,
 Nos. _____, filed with the letter of _____.
- ☐ the drawings, sheets/fig _____, as originally filed,
 sheets/fig _____, filed with the demand
 sheets/fig _____, filed with the letter of _____,
 sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/01573

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-34</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-34</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-34</u>	YES
	Claims		NO

2. Citations and explanations

The claimed invention relates to methods for changing the bandwidth of a circuit switched channel in a time division multiplexed network, said channel comprising a set of time slots within each recurring frame of a bit-stream of said network. One purpose of the invention is to provide a simple, reliable, safe and effective mechanism for synchronising bandwidth changes in circuit switched networks, especially in a DTM (Dynamic synchronous Transfer Mode) network. This is achieved by the features stated in the characterising part of claims 1, 5, 12, 16, 17, 19, and 31.

None of the documents cited in the International Search Report or any combination of them can be considered to disclose the invention as claimed in the claims 1, 5, 12, 16, 17, 19, and 31. The cited documents describe only the general state of the art, which is not considered to be of particular relevance for the invention. Therefore, the methods according to claims 1, 5, 12, 16, 17, 19, and 31 fulfil the requirements of novelty and inventive step according to Article 33(2, 3).

Dependent claims 2 - 4, 6 - 11, 13 - 15, 18, 20 - 30, and 32 - 34 disclose further features of the invention according to claims 1, 5, 12, 16, 17, 19, and 31 and fulfil the requirements of novelty and inventive step according to PCT Article 33(2,3).

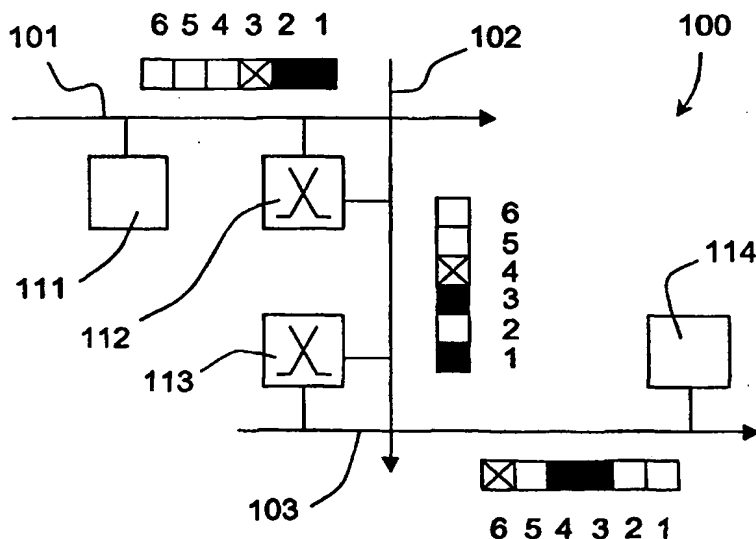
Claims 1 - 34 also fulfil the requirement of industrial applicability according to PCT Article 33(4).



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : H04L 12/52, H04Q 11/04, H04J 3/16		A3	(11) International Publication Number: WO 00/16522
			(43) International Publication Date: 23 March 2000 (23.03.00)
(21) International Application Number: PCT/SE99/01573 (22) International Filing Date: 9 September 1999 (09.09.99) (30) Priority Data: 9803068-7 10 September 1998 (10.09.98) SE (71) Applicant (for all designated States except US): NET INSIGHT AB [SE/SE]; Ingenjörsvägen 3, S-117 43 Stockholm (SE). (72) Inventors; and (75) Inventors/Applicants (for US only): LINDGREN, Per [SE/SE]; Maria Prästgårdsgata 12, S-118 52 Stockholm (SE). BOHM, Christer [SE/SE]; Varpholmsgränd 32, S-127 46 Skärholmen (SE). DANIELSSON, Magnus [SE/SE]; Kyrkvägen 3 A, S-182 74 Stocksund (SE). HOLM, Lucas [SE/SE]; St. Paulsgatan 2, S-118 48 Stockholm (SE). BOSTRÖM, Anders [SE/SE]; Mäster Simonsväg 14, S-170 66 Solna (SE). (74) Agent: AWAPATENT AB; P.O. Box 45086, S-104 30 Stockholm (SE).		(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. (88) Date of publication of the international search report: 25 May 2000 (25.05.00)	

(54) Title: METHODS FOR CHANGING THE BANDWIDTH OF A CIRCUIT SWITCHED CHANNEL



(57) Abstract

The present invention relates to methods for changing the bandwidth of a circuit switched channel in a time division multiplexed network, wherein said channel comprises a set of time slots within each recurring frame of a bitstream between a first node and a second node. According to the invention one or more additional time slots within each recurring frame of said bitstream are reserved, including using, during a period of time, only said set of time slots for transmitting payload data pertaining to said channel while providing, during said period of time, information indicating that said one or more additional time slots are currently not used for transferring payload data. After said period of time, said set of time slots is used as well as said one or more additional time slots on said bitstream for transmitting payload data pertaining to said channel.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 99/01573

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04L 12/52, H04Q 11/04, H04J 3/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04L, H04Q, H04J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPIL, EDOC, INSPEC, INTERNET

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4980886 A (SIMON BERNSTEIN), 25 December 1990 (25.12.90), column 3, line 1 - line 61; column 4, line 34 - column 5, line 5; column 8, line 23 - column 11, line 11, figures 6,8, claims 1-34, abstract --	1-33
A	US 5157657 A (PHILIP G. POTTER ET AL), 20 October 1992 (20.10.92), column 3, line 37 - line 52; column 5, line 22 - column 6, line 32, figure 1, claims 1-26 --	1-33

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

13 March 2000

Date of mailing of the international search report

17-03-2000

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 99/01573

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5229992 A (MARK JURKEVICH ET AL), 20 July 1993 (20.07.93), column 4, line 44 - column 5, line 45; column 14, line 23 - line 59; column 18, line 5 - column 21, line 47, figures 6A,8, claims 1-8 --	1-33
A	WO 9724846 A1 (DYNARC AB), 10 July 1997 (10.07.97), page 23, line 20 - page 24, line 16, claims 1-3 --	1-33
A	WO 9736403 A1 (NET INSIGHT AB), 2 October 1997 (02.10.97), claims 1-39 -- -----	1-33

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/SE 99/01573

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
US	4980886	A	25/12/90	NONE	
US	5157657	A	20/10/92	AU 623953 B AU 4596889 A	28/05/92 21/06/90
US	5229992	A	20/07/93	NONE	
WO	9724846	A1	10/07/97	AU 1404197 A CA 2241554 A EP 0873629 A SE 9504681 A US 5982780 A	28/07/97 10/07/97 28/10/98 04/08/97 09/11/99
WO	9736403	A1	02/10/97	AU 2315097 A EP 0850343 A EP 0886935 A SE 508889 C SE 9601132 A	17/10/97 01/07/98 30/12/98 16/11/98 10/10/97